



No.	Author	Date
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	Title	
	2013 Spring Wild Turkey Gobbling Counts.	

Abstract: The number of male wild turkeys heard gobbling along the traditional 10 control roadside routes during 1-28 April 2013 was 0.69 gobblers heard per stop, a 20% decrease compared to the gobbling index of 0.86 in 2012. Four new routes were re-established in 2012 to expand the statewide coverage and experienced a 15% decrease in 2013 compared to 2012. Overall, the statewide gobbling index for the 14 routes decreased 19% in 2013. The long-term trend, based on a 5-yr moving average, shows a general increase from 1987-2006, followed by a general decrease since the 2006 peak. The 2013 gobbling index of 0.73 was not different than the 5 yr-mean ($P > 0.05$) likely due to the addition of values from the 4 routes added in 2012.

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Gobbler counts are conducted annually during late March to April to determine the relative population trends of wild turkeys in the areas surveyed. In 2013, 10 traditional areas were surveyed in portions of 14 counties and 4 new routes covering portions of 5 more counties were re-established in 2012 to expand the statewide coverage and will eventually be incorporated into the statewide index after at least 3 years of accumulated data. Roadside gobbler trend routes were conducted in conjunction with roadside trend routes for drumming male ruffed grouse. Each route has 15 predetermined listening stops along 10-20 miles of rural roadways. Routes are conducted at least twice, in opposite directions, and the highest gobbler count is used for determining the gobbling index. The average number of gobblers heard on the traditional 10 roadside trend routes in 2012 ranged from 0.40 to 1.47 gobblers heard per stop (**Table 1**). Overall, 0.69 gobblers heard per stop, a 20% decrease compared to the gobbling index of 0.86 in 2012. Four new routes were re-established in 2012 to expand the statewide coverage and experienced a 15% decrease in 2013 compared to 2012. Overall, the statewide gobbling index estimated from the 14 routes decreased 19% in 2013.

While roadside routes are not accurate indicators of annual trends in wild turkey populations, they provide some long-term (≥ 5 yrs) trends and provide information to compare areas relative to each other (**Table 2**). Weather conditions during the survey period can contribute to the variability of annual trends. Annual variations may also reflect the proportion of vocal 2-year-old gobblers in the population rather than actual population trends over the long term. The substantial increase in the 2006 gobbling index is a prime example of where the record high summer brood production in 2004 (Backs 2006) became quite evident with a large cohort of very vocal 2-yr-old gobblers (**Figure 1**). The long-term trend, based on a 5-yr moving average, shows a general increase from 1987-2006, followed by a general decrease since the 2006 peak. The 2013 gobbling index of 0.73 was not different than the 5 yr-mean ($P > 0.05$) likely due to the addition of values from the 4 routes added in 2012. The slight depression in the gobbling indices since the 2006 peak probably reflects the low summer brood production of 2005-2011. Summer brood production increased in 2012 but will not likely influence the gobbling index until 2014 when there is a slight increase in 2-yr-old gobblers resulting from the 2012 production.

Literature Cited

Backs, S. E. 2006. Wild turkey brood production – Summer 2005. Wildlife Management and Research Note No. 910. Indiana Division of Fish and Wildlife, Indianapolis. 5pp.





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Table 1. Wild turkeys heard on roadside counts in Indiana between 1-22 April 2013.

County/Area	No. of Routes/ Stops	No. of Repititions (for/rev)	Total Turkeys Heard	Total Seen	Highest Number Heard/Rt.	Turkeys Heard ^{1/} Per Stop	
						2012	2013
Traditional Routes							
Jackson, Brown, Monroe (Hickory Ridge, USFS-HNF)	1/15	3	14	0	6	1.60	0.40
Owen-Putnam	1/15	2	12	3	6	0.47	0.47
Perry (Oriole-St.Croix-USFS-HNF)	1/15	2	20	7	11	0.60	0.73
Washington (Jackson-Washington SF)	1/15	2	15	11	8	0.60	0.53
Lawrence & Orange (Lost River - E, USFS-HNF)	1/15	2	11	1	7	0.93	0.47
Martin & Orange (Lost River - W, USFS)	1/15	2	25	0	15	0.67	1.00
Morgan-Monroe (M-M SF)	1/15	2	13	1	8	0.93	0.53
Greene	1/15	2	12	1	9	0.60	0.60
Orange (Little Fork, USFS HNF)	1/15	2	18	6	10	0.87	0.67
Jefferson	1/15	2	38	8	22	1.33	1.47
					SubMean	0.86	0.69
New Routes ^{2/}							
Marshall-Starke	1/15	2	19	7	10	0.73	0.67
Parke	1/15	2	32	18	17	1.27	1.13
Lagrange/Steuben Co (Pigeon River FWA)	1/15	2	19	3	14	1.40	0.93
Brown (Yellowwood SF)	1/15	1	10	2	10	0.60	0.67
					SubMean	1.00	0.85
					Grand Mean	0.90	0.73

^{1/} Indices calculated using route with highest count.

^{2/} Re-established routes initiated in 2012 to expand statewide coverage.

Table 2. Wild turkey roadside gobbling counts during April in Indiana from 1987 to 2013.

Year	Gobblers Heard Per Stop *														ROW MEAN	SE
	HICKORY	OWPUT	PERRY	WASH	LR-EAST	LR-WEST	MORGAN	GREENE	LICKCR	JEFFERSON	MARSTRK	PARKE	LAGSTEU	BROWN		
1987	1.10	0.07	0.00	0.20	0.53	NR	0.27	0.00	0.00	1.00	-	-	-	-	0.35	0.144
1988	0.73	0.13	0.13	0.00	0.47	NR	0.20	0.07	0.00	1.13	-	-	-	-	0.32	0.129
1989	1.13	0.00	0.21	0.00	0.87	NR	0.20	0.00	0.47	0.73	-	-	-	-	0.40	0.141
1990	0.80	0.13	0.20	0.00	1.00	1.27	0.27	0.07	0.73	0.53	-	-	-	-	0.50	0.137
1991	0.33	0.20	0.40	0.00	0.87	0.53	0.33	0.07	0.87	1.07	-	-	-	-	0.47	0.115
1992	0.73	0.07	0.20	0.00	0.80	1.87	0.00	0.07	0.67	0.53	-	-	-	-	0.49	0.183
1993	0.47	0.00	0.47	0.00	0.27	0.53	0.07	0.20	0.47	1.20	-	-	-	-	0.37	0.113
1994	0.53	0.13	0.47	0.00	0.73	0.27	0.13	0.27	0.80	0.80	-	-	-	-	0.41	0.094
1995	0.67	0.00	0.80	0.00	0.93	0.73	0.00	0.13	0.80	1.53	-	-	-	-	0.56	0.162
1996	1.13	0.33	0.80	0.07	0.60	1.47	0.27	0.13	0.53	0.80	-	-	-	-	0.61	0.142
1997	0.67	0.20	0.87	0.07	0.73	0.47	0.47	0.00	0.60	0.93	-	-	-	-	0.50	0.102
1998	1.40	0.27	0.47	0.40	0.60	0.53	0.33	0.67	0.27	0.80	-	-	-	-	0.57	0.107
1999	0.80	0.60	0.47	0.27	1.27	0.53	0.67	0.40	0.87	1.20	-	-	-	-	0.71	0.104
2000	0.60	0.20	0.53	0.67	1.27	0.47	0.27	0.67	1.20	1.33	-	-	-	-	0.72	0.129
2001	0.73	0.53	0.60	0.60	0.67	0.73	0.33	0.33	0.93	1.73	-	-	-	-	0.72	0.126
2002	0.33	0.60	0.53	0.80	1.27	0.93	0.53	0.20	1.13	1.33	-	-	-	-	0.77	0.124
2003	0.53	0.20	0.60	1.47	1.07	0.67	0.80	0.60	1.00	2.13	-	-	-	-	0.91	0.175
2004	0.80	0.20	1.07	1.33	0.87	0.73	1.33	0.60	1.00	1.87	-	-	-	-	0.98	0.145
2005	0.93	0.27	0.87	1.20	1.07	1.47	0.33	0.60	0.80	1.47	-	-	-	-	0.90	0.133
2006	2.67	0.60	0.93	0.73	1.60	2.27	0.53	1.53	1.47	2.20	-	-	-	-	1.45	0.238
2007	1.07	0.20	1.00	0.80	0.60	1.07	0.73	0.27	0.73	1.53	-	-	-	-	0.80	0.125
2008	2.33	0.33	0.67	0.40	0.53	0.67	0.67	0.07	0.67	1.20	-	-	-	-	0.75	0.199
2009	2.13	0.33	0.60	0.27	0.53	1.20	0.80	0.20	1.20	0.60	-	-	-	-	0.79	0.186
2010	0.80	0.67	0.53	0.47	0.40	0.93	0.73	0.20	1.27	1.07	-	-	-	-	0.71	0.125
2011	1.20	0.33	0.53	0.67	0.53	1.33	0.80	0.07	0.87	1.07	-	-	-	-	0.74	0.125
2012	1.60	0.47	0.60	0.60	0.93	0.67	0.93	0.60	0.87	1.33	0.73	1.27	1.40	0.60	0.90	0.097
5 Yr Mean	1.51	0.37	0.67	0.52	0.52	1.04	0.75	0.16	0.95	1.09	-	-	-	-	0.76	0.125
2013	0.40	0.47	0.73	0.53	0.47	1.00	0.53	0.60	0.67	1.47	0.67	1.13	0.93	0.67	0.73	0.080

*

= Indices calculated using route with highest count.

HICKORY = Hickory Ridge (USFS), Lawrence and Jackson Counties

OWPUT = General area of Owen-Putnam St. Forest

PERRY = northern portion of Perry Co.(USFS)

WASH = general area of Jackson-Washington St. Forest in Washington County

LR-EAST = Lost River Unit - East, USFS, Lawrence and Orange Counties.

MORGMON = general area of Morgan-Monore St. Forest in Morgan county.

GREENE = eastern Greene County

YEAR MEAN = Arithmetic average value for all routes for a respective year (row).

SE = standard error of annual (row) mean

5 Yr Mean = mean for 5 years previous to survey year (2008-2012)and does not include values for routes initiated in 2012; MARSTRK, PARKE, LAGSTEU, OR BROWN.

LICKCR = Lick Creek Area, USFS, in Orange County.

JEFFERSON = Jefferson County

LR-WEST = Lost River Unit - West, USFS, Orange and Martin Counties.

MARSTRK = Marshall-Starke counties.

PARKE = Parke County.

LAGSTEU = Lagrange-Steuben counties (Pigeon River Fish & Wildlife Area.

BROWN = Yellowood State Forest in Brown County.

Figure 1. Roadside Gobbling Indices

